SYSTEM CONTROLS
Versatility is Reality

System Controls Technology Solutions Pvt Ltd

TWO AXES ELECTRO-OPTIC PEDESTAL (TAEP)

Products:

- Stabilized Platforms
- Gimbals
- Positioners
- Pointing Systems
- Pan Tilt Units
- Radar Subsystems
- Electro-Optical Systems
- Opto-Mechanical Systems
- Motion Controls Systems
- Test Benches

Services:

- Engineering Design & Development
- Electronic Testing & Assembly
- CNC Machining & Manufacturing
- System Integration

The Two-Axes Electro-Optic Pedestal gives accurate dynamic motion in both Azimuth & Elevation Axes. The elevation and azimuth axes movements are enabled through individual DC motors with precision gear mechanism. Zero backlash geared brush-less DC motor drives each axis. It provides high torque in compact assembly. An optical angle encoder on each motor shaft provides the position and velocity feedback to servo amplifier of the motor. This system is useful for tracking through remote control. Azimuth rotation can either be N x 360^{o} continuous or non-continuous. If customer requires continuous rotation in azimuth axis, reliable slip rings will be provided for control of data link, video link and power supply. The Pedestal is mountable on Tripod, Mast, etc. Designed, developed and manufactured as a stand-alone system for providing continuous rotation with payload of 50kg. The rotational speed can be varied from 0.05 deg/sec to 60 deg/sec through commands from host computer. The Pedestal meets the requirement of EMI/EMC as per IP65 and MIL STD 810F. This system is useful for tracking through remote control.

SYSTEM CONTROLS
Versatility is Reality

Technical Specifications

Model No.: SC-153175-142-642-202

Azimuth Drive	Movement Control	: Closed loop digital control in position	
	Scanning Velocity	: 0.005°/s to 60°/s	
	Range	: N x 360° (non-continuous or continuous)	
	Accuracy	: 0.03 deg setting and positioning	
	Maximum Acceleration	: 3 rad/second	
Elevation Drive	Movement Control	: Closed loop digital control in position	
	Scanning Velocity	: 0.005°/s to 60°/s	
	Range	: -90° to +95°	
	Accuracy	: 0.03 deg setting and positioning	
	Maximum Acceleration	: 3 rad/second	
	Brake requirement in elevation	: Available	
Others	Payload & Payload Mounting	: 50 kg max; Dual Side Mount	
	Pedestal weight	: 40 kg max	
	Power input	: 28V DC, 30A continuous and 40A peak	
	Interface	: RS422 / Ethernet	
	Dimensions	: Compact	
	Finish	: Painting or Powder Coating as per customer requirement	
	Control Unit	: Hard Control Panel with Joystick or through Computer	
Slip Ring (if required)	Optimum		
	Operating Modes	: Standby / Safe mode Go-to Point mode Joystick/Keypad	
	Safety	: Soft limits, Electrical limits and Mechanical limits	
	Controls & Monitoring	: PC based GUI systems working on Windows / Linux	
Environmental	**Conditions**	**Operating**	**Storage**
	Temperature	-20°C to +70°C	-30°C to +70°C
	Humidity	95% at 45°C	95% at 45°C
	Wind	85 kmph	120 kmph – Survival
	Vibration, Bump, Shock	MIL-STD-810F	
	Salt Fog	Sea shore environment of 5% of Nacl & 100% humidity, also wind borne salt	
	Protection	EMI/EMC as per IP6	
Accessories	Heavy Duty Tripod (as per customer requirement)		

www.system-controls.com
#119, 3rd Main, East of NGEF Layout, Kasturi Nagar, Bangalore – 560043
Ph No.: 080-40820400; Fax: 080-40820426
E-mail: sales@system-controls.com; projects@system-controls.com